

REMARKS

This is in response to the Office Action mailed on August 15, 2006. In the Office Action, claims 1, 65-68 and 85-87 were pending. All pending claims were rejected. With this Amendment, claim 85 has been amended and new claim 88 has been added. In view of the following, reconsideration and allowance are respectfully requested.

First, Applicants note that the Office Action did not indicate whether the drawings were accepted. Acceptance of the drawings is hereby requested.

On page 2 of the Office Action, claims 65 and 67 were rejected under 35 U.S.C. §102(b) as being anticipated by Bolle et al. (hereinafter "Bolle", U.S. Patent No. 5,883,971). Independent claim 65 recites "utilizing the slope representation to determine a quality characteristic of the raw scan image and an additional classification based on a brightness level within at least a portion of the raw scan of the image."

In the rejection, the Office Action cited col. 3, lines 66 - col. 4, line 3 of Bolle. The cited portion of Bolle refers to a comparison for determining whether a block is a smudged block. The comparison is performed by measuring contrasts and determining whether the contrast measure is less than a threshold. Thus, the cited portion of Bolle is performing comparisons based on contrast and not on brightness. Further, the only discussion of brightness in Bolle occurs with respect to determining foreground and background pixels and pixel direction (see col. 5, ln. 58 - col. 6, ln. 14). In particular, Bolle states that a direction of a pixel is determined based on the direction in which the brightness variation is minimum. This is not "utilizing the slope representation to determine a quality characteristic...and an additional classification based on a brightness level" as required by claim 65. Instead, Bolle only teaches determining pixel direction based on a brightness variance. For at least this reason, Applicants respectfully submit that claim 65 is neither taught nor suggested by the cited reference and is in allowable form. Further, Applicants submit that claim 67 is also in allowable form at least based on its relation to claim 65.

On page 4, claims 68, 1, and 85-87 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bolle, and further in view of Davis (U.S. Patent No. 5,420,937). Applicants submit that claims 68 and 1 are allowable at least based on their relation to claim 65, discussed above. Further, Applicants submit that claim 85 is also neither taught nor suggested by the combination of Bolle and Davis.

Claim 85 has been amended to recite "executing a count of pixels within at least one pixel grid of the array of pixel grids, wherein the count is based on a pixel value of at least one pixel within the at least one pixel grid." The method further recites comparing the count of the pixels in the at least one pixel grid to a reference and determining a quantified quality classification as a relation of the count of the pixels to the reference. Applicants note that executing a count of pixels based on pixel value is supported in the specification beginning on page 30, ln. 4.

The Office Action cites Bolle, col. 3, lns. 10-46, as teaching the pixel count recited in claim 85. The cited portion of Bolle discloses dividing an image into blocks and determining whether each block is a contiguous region (i.e., blocks in the foreground that are directional) based on the number of pixels in each block that are directional and based on contrast determinations. The quality measure is the ratio of the area of all the contiguous blocks to the total area of the image. First, Applicants note that Bolle does not teach or suggest counting pixels. While Bolle discusses determining block area, there is no discussion as to how that determination occurs. Since area is defined as length multiplied by width, it can be assumed that the area in Bolle is calculated as such. However, this is not "counting" pixels and can yield substantially different results depending upon pixel configuration (i.e., inconsistent distribution, asymmetrical blocks, etc.).

Further, even if the assumption stated in the Office Action is made, Bolle still does not teach or suggest the pixel counting step recited in claim 85. Instead, Bolle would disclose counting all pixels in the blocks (i.e., to determine area) that have been deemed to be contiguous regions. Thus, Bolle does not disclose a count based on pixel value. For at least this reason, Applicants respectfully submit that claim 85 is neither taught nor suggested by the cited

references and is in allowable form. Further, Applicants submit that dependent claims 86-88 are also in allowable form at least based on their relation to claim 85. Additionally, Applicants believe that at least a couple of these claims independently recite features that are neither taught nor suggested by the cited references.

For example, claim 87 recites "wherein the reference can be tuned." Applicants note that Bolle discloses comparing block area to a total image area. Thus, the comparison is to an image having a size that cannot be tuned. Further, claim 88 recites "counting pixels having a pixel value over a predetermined value." However, Bolle discloses determining block areas and does not disclose counting pixels based on calculations such as a pixel value. Applicants note that these are simply some examples of dependent claims that are believed to be independently patentable.


On page 7, claim 66 was rejected under U.S.C. §103(a) as being unpatentable over Bolle, in view of Davis, and further in view of Gagne et al. (U.S. Patent No. 5,363,453). Applicants respectfully submit that claim 66 is in allowable form at least based on its relation to claim 65, discussed above.

In view of the foregoing, reasons, reconsideration and allowance of all pending claims, namely claims 1, 65-68 and 85-88, are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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